# **B.** Reasonable Foreseeable Development Scenarios

The following sections describe projected developments of oil, gas and mineral exploration, recreation, facilities and private land use within the next 12 years.

# 1. Fluid Mineral Exploration and Development

Any future drilling interest in the area is expected to be focused on deep target below 10,000 feet. Success rates for California exploratory wells are 1:15, at best, and the overall success in the CPNA is about 1:50. The 6 exploration wells drilled within the last 10 years outside of the existing Russell Ranch and Morales Canyon Oil Fields have been unsuccessful. A single potential new field with reserves between 2 and 5 million barrels of oil could be developed with 25 to 30 wells (as predicted in the Caliente RMP).

A reasonable estimate of seismic survey line length would be 20 to 100 miles. Surface disturbance from 100 miles will be a maximum of 125 acres. The disturbance estimate includes off-road access, vibroseis or drill sites, and geophone layout. All but a small portion of this disturbance will be temporary (less than 3 years) and will recover without reclamation. A maximum of 6 exploration wells will disturb up to 20 acres including access road construction. If these exploratory wells are unsuccessful, sites will be restored as soon as protocol allows. If successful, efforts will be made to reduce the amount of original surface disturbance to that necessary for the safe operation and maintenance of the well.

A successful exploratory well may bead to 25 to 30 development wells, with a total disturbance area of 30 acres. Oil produced must be either trucked out or tied into one of the existing pipelines.

Total gross surface disturbance due to oil and gas exploration and development activities is estimated to total 175 acres. Most, if not all, surface impacts will be reclaimed within the 12 year plan life.

# 2. Solid Mineral Exploration and Development

## a. Locatable Minerals

Gypsum occurrences in the area are shallow, low-grade and cover large acreage. In the past gypsum mining disturbed large tracts of land. Today, impacts to endangered species habitat and the cost of mitigation and reclamation would render similar mining methods economically infeasible.

Rocks in the Temblors contain readily detectable amounts of uranium. Miocene marine phosphorites in this area are commonly radioactive, and in the early 1960s it was suggested that uranium could be recovered as a byproduct of phosphate mining. However, due to very low grades and prices, potential for development is negligible. Should Congress respond to public proposals to withdraw Carrizo from location under the mining laws, impacts to industry should be negligible.

#### b. Solid Leasable Minerals

The phosphate occurrences within the CPNA are low grade. Phosphate resources are unlikely to be developed because of high mining costs.

Saline minerals were intermittently extracted from Soda Lake prior to 1940. By 1968, permit applications were rejected due to environmental considerations and new prospecting and extracting saline minerals from Soda Lake will not be allowed.

#### c. Salable Minerals

Sand and gravel mining for road maintenance will continue. There is 1 active mine situated on DFG land, and 2 other potential gravel sites have been identified. The gravel pit on DFG lands may expand by 10 acres during the life of the plan and the 2 new sites may be developed up to 10 acre each.

## d. Geothermal

Most of the region is favorable for the discovery of thermal water at shallow depth. There is no Known Geothermal Resource Area designation, identified hydrothermal convection system or warm springs in the area.

# 3. Recreation

Because of rising awareness of the value of the CPNA, recreational and educational use by special interest groups, academia and the general public is expected to increase and will be oriented toward the observation and enjoyment of the area's natural or historical resources. Recreational activities that have traditionally occurred in Carrizo will be managed to minimize impacts from future use. New types activities will be discouraged.

Because of the need to protect natural resources, recreational opportunities must be somewhat limited and designated to specific locations. Interpretation opportunities are outstanding and will be the primary focus of future recreational development. Also, visitor services such as camping areas and toilet facilities will be designed to minimally impact sensitive resources. Project plans for these developments will involve an interdisciplinary approach with public involvement.

The first site development will be the improvement of the Painted Rock parking lot with a restroom, picnic tables, and interpretive kiosk. In conjunction with the Painted Rock parking lot improvements, implementation of the recently adopted Interpretive Prospectus will commence with improvements slated for the Soda Lake Overlook, the Soda Lake Interpretive Trail, and Wallace Creek.

The existing Selby parking area will be the first campground development because of its present camping use, access to the Calientes, and because the development can occur with minimal additional surface disturbance. Camping at KCL will continue, although actual site planning and development will occur later.



## 4. Infrastructure

A variety of facilities, roads, pipelines and transmission lines were in place before acquisition began. Certain facilities are required to fulfill the mission, and infrastructure maintenance will be the responsibility of the individual managing partner on lands they administer. A considerable amount of sharing of equipment and supplies is done for development, operations and maintenance.

The managing partners are jointly evaluating proposals for shared research, dormitory, and administrative facilities. Constraints on the managing partners, however, influence the type of contribution each makes depending on land ownership.

The BLM will complete the development of the Washburn Administration site and fire station. Drilling a new water well for a potable water source, assessing the feasibility of installing commercial power and phone lines, and realigning and upgrading the access road are also being considered for this site.

If the managing partners do not develop a shared administrative facility, the DFG will develop the Painted Rock Ranch as its headquarters. Eventually, with the work load associated with this project, a full-time manager for the DFG properties in SLO County will be needed.

The American unit may be explored as an additional facility if the Painted Rock Ranch is not adequate.

Necessary developments at the American Unit include a water well and distribution system. The current main water line is old, with excessive mineralization, and must be replaced soon. Electrical power and phone service, available within approximately 1/2 mile, need to be extended to the headquarters site. A septic system must replace the current rented chemical latrine.

If this location is used as a headquarters, an office, a shop building and equipment storage barn and a nursery are minimum requirements. Providing all-weather access to the site will entail grading, adding road base and installing culverts.

There are several remaining tasks to bring the Panorama Unit (the east side parcel of CDFG's CPER) up to full utility. A minor shop facility is planned since it has power. The new tank on the Temblor foothills needs to have a water supply line installed.

As new portions of the CPNA are included in the livestock grazing system, upgrades and improvements to livestock management facilities, such as new water troughs, water tanks, fences, corrals, wells, pipelines and loading chutes may be necessary. Maintenance and upgrades will also occur in areas currently under the livestock grazing system. Many existing fences are not necessary and will be removed as time and resources allow. New fences will meet criteria for pronghorn antelope passage.



The Saucito Ranch is not currently being used as a facility, but has historical significance and may be restored or stabilized as funding allows.

The road network within the CPNA is administered by the managing partners, private landowners, California Valley Community Service District and San Luis Obispo County. The

County will maintain, upgrade or realign existing roads, stage equipment and materials in designated areas, repair erosion problems and remove roadbed material from designated areas. The managing partners will engage in similar activities with the additional possibility of creating new roads.

Existing utility lines have the potential to be upgraded by the administering agencies. The transcontinental cable maintained by ATT could be replaced. The affects of such large scale surface disturbing impacts are beyond the scope of this plan and associated biological opinions, and will be evaluated separately should the need arise.

## **5. Private Land Use**

Most of the private land in the CPNA is zoned for agricultural uses. According to the Land Use Element of the San Luis Obispo county general plan, allowable uses for this land include crop production and grazing, transmission and receiving facilities, fisheries and game preserves, forestry, accessory storage and pipelines and power transmission. Additionally, specific uses in the following categories are allowed subject to special standards and processing requirements: agriculture, cultural uses, manufacturing and processing, residential, resource extraction, retail trade, services, transient lodging, transportation and wholesale trade. All these uses have the potential to occur on private lands within the CPNA, but are not expected. The most likely use of private lands within the CPNA is expected to be self-contained "ranchettes" on the smaller parcels. These usually consist of mobile homes using generators for power and on-site wells for water.

Private lands within and adjacent to the CPNA could attract development catering to the visiting public. This may increase local revenue, but increasing visitor numbers may detract from the rural nature of the area and contribute to unlawful acts.